EDLIS, Ofir et al.

09/778,818

Attorney Docket No.: P-3309-US

Assignee:

Intel Corporation

Amendments to the Claims:

The following listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

- 1. (Currently Amended) A method comprising: performing processing operations at a first clock rate during at least part of a first time period in which a radio frequency module receives through an antenna incoming wireless communication signals carrying data and stores said data; and performing background processing of at least a portion of said received signals at a second, faster clock rate during at least part of a second time period in which said radio frequency module is de-activated.
- 2. (Previously Presented) The method according to claim 1 wherein performing background processing comprises processing spread spectrum signals.
- 3. (Previously Presented) The method according to claim 1 wherein performing background processing comprises processing Code Division Multiple Access (CDMA) information.
- 4. (Previously Presented) The method according to claim 1 wherein performing background processing comprises performing at least one of synchronizing pseudorandom noise (PN) offset of said received signals, searching for at least one neighboring communications cell and searching for at least one candidate communications cell.

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5. (Previously Presented) The method according to claim 4 wherein synchronizing comprises detecting a current pseudorandom noise (PN) offset of said received signals, and, if different from a previous PN offset, shifting to the current PN offset.

- 6. (Previously Presented) The method according to claim 1 comprising receiving a carrier during at least part of said second time period.
- 7. (Previously Presented) The method according to claim 1 comprising receiving said received signals in at least one wake period of a slotted mode.
- (Previously Presented) The method according to claim 7 comprising reducing the power consumed during said at least one wake period after recording said received signals.
- 9. (Cancelled)
- 10. (Currently Amended) A receiver comprising:
 - a radio frequency module adapted to receive through an antenna wireless communication signals and to store at least a portion of the received signals during a first time period and to be de-activated during a second time period; and a processor adapted to operate at a first clock rate during at least part of said first time period, to de-activate the radio frequency module for said second time period, and to perform background processing of at least said portion of received signals at a second, faster clock rate during at least part of said second time period.

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The receiver according to claim 10 wherein said radio 11. (Previously Presented) frequency module comprises a memory device adapted for storing therein said portion of received signals, and said processor comprising a digital processing unit, wherein said memory device is adapted to input said portion of received signals to said digital processing unit.

- (Previously Presented) The receiver according to claim 10 wherein said radio 12. frequency module comprises a memory device adapted for storing therein said portion of received signals, and said processor comprises a rake receiver and search engine, wherein said memory device is adapted to input said portion of received signals to said rake receiver and search engine.
- (Previously Presented) The receiver according to claim 11 comprising a sampling unit 13. adapted to receive said portion of received signals and to input said portion of received signals to said memory device.
- 14. (Previously Presented) The receiver according to claim 12 comprising a sampling unit adapted to receive said portion of received signals and to input said portion of received signals to said memory device.
- 15. (Currently Amended) A cellular communication system comprising: a radio frequency module adapted to receive through an antenna wireless communication signals and to store at least a portion of the received signals during a first time period and to be de-activated during a second time period; and a processor adapted to operate at a first clock rate during at least part of said first time period, to de-activate the radio frequency module for said second time period, and to perform background processing of at least said portion of received signals at a second, faster clock rate during at least part of said second time period.

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16. (Previously Presented) The cellular communication system according to claim 15

wherein said radio frequency module comprises a memory device adapted for storing

therein said portion of received signals, and said processor comprises a digital

processing unit, wherein said memory device is adapted to input said portion of received

signals to said digital processing unit.

17. (Previously Presented) The cellular communication system according to claim 15

wherein said radio frequency module comprises a memory device adapted for storing

therein said portion of received signals, and said processor comprises a rake receiver

and search engine, wherein said memory device is adapted to input said portion of

received signals to said rake receiver and search engine.

18. (Previously Presented) The cellular communication system according to claim 16

comprising a sampling unit adapted to receive said portion of received signals and to

input said portion of received signals to said memory device.

19. (Previously Presented) The cellular communication system according to claim 17

comprising a sampling unit adapted to receive said portion of received signals and to

input said portion of received signals to said memory device.

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